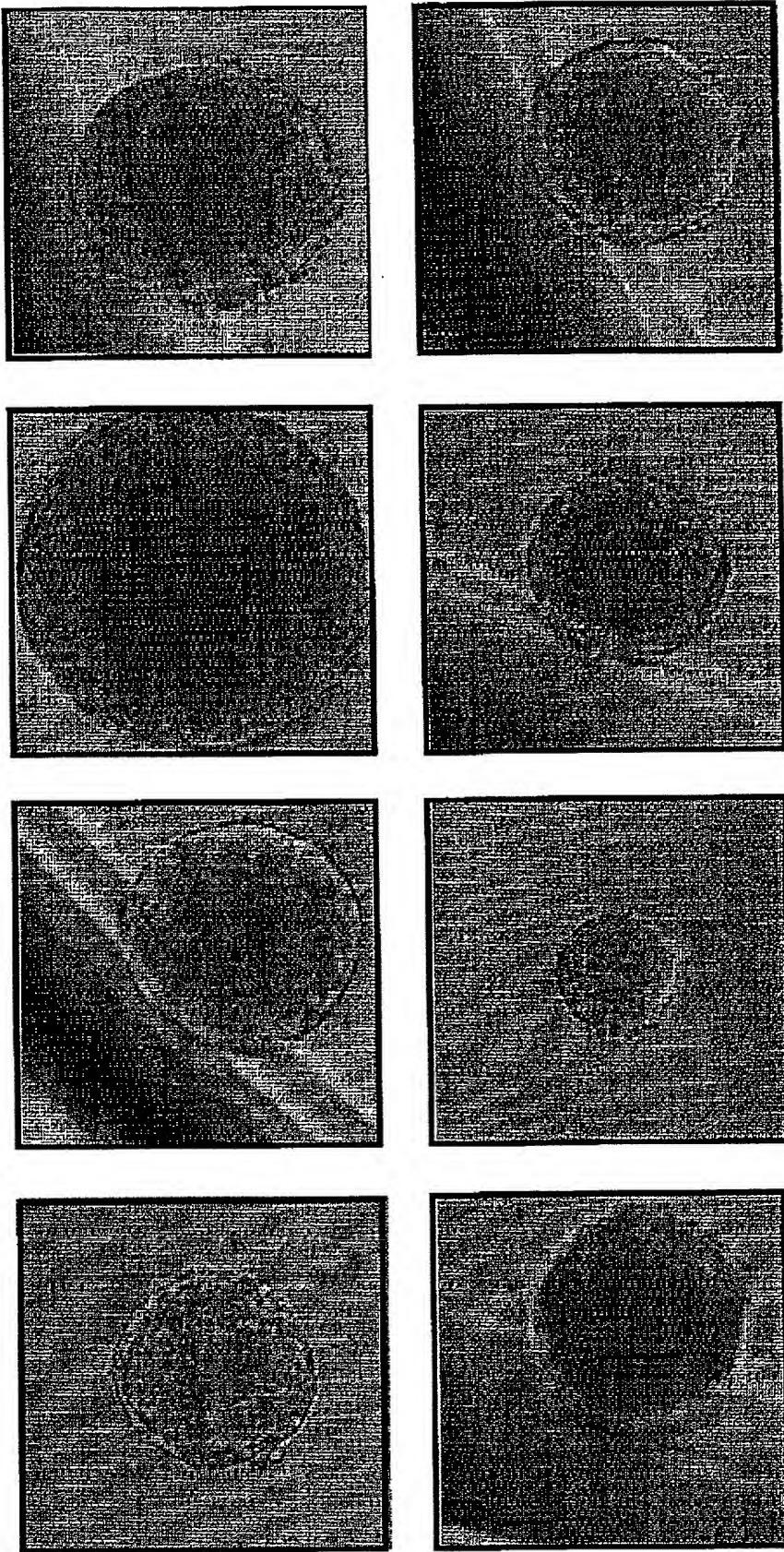


FIG. 1

Clonal Expansion of Neural Stem/Progenitor Cells

- Neurospheres can be derived from single-cell sorted 5F3⁺ cells

Week 8 NS-IC, 1 cell/well



FBR 1209 (16 G.W.)

20x

Isolation of Human Neural Stem Cells by Cell Surface Markers

Neurosphere initiating cells can be separated using monoclonal antibody 5E12

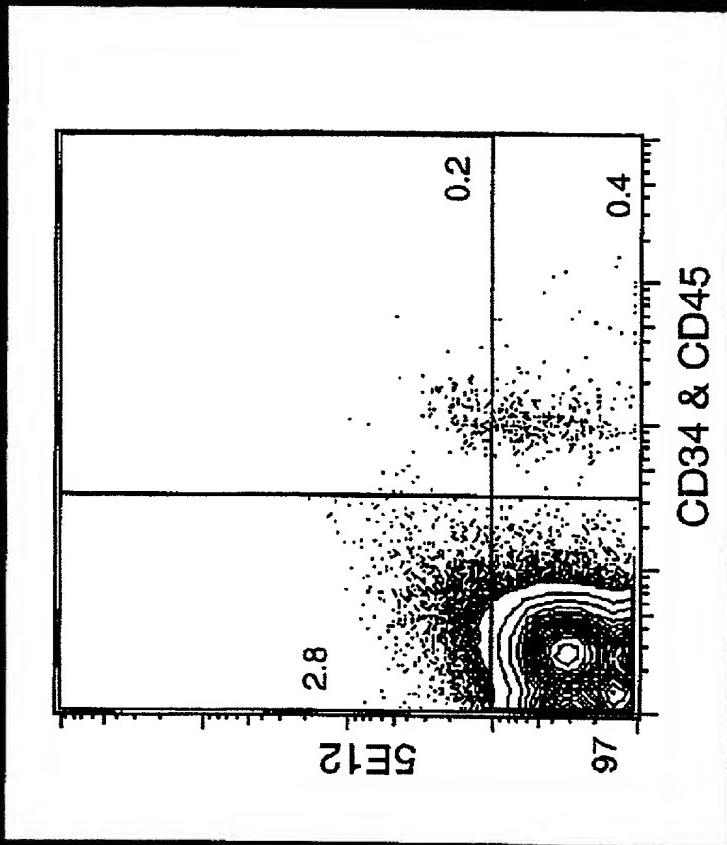
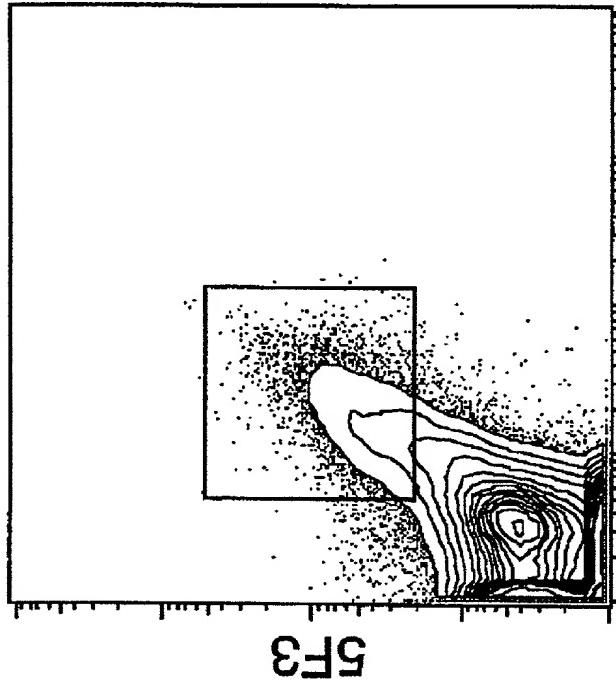


Fig. 3

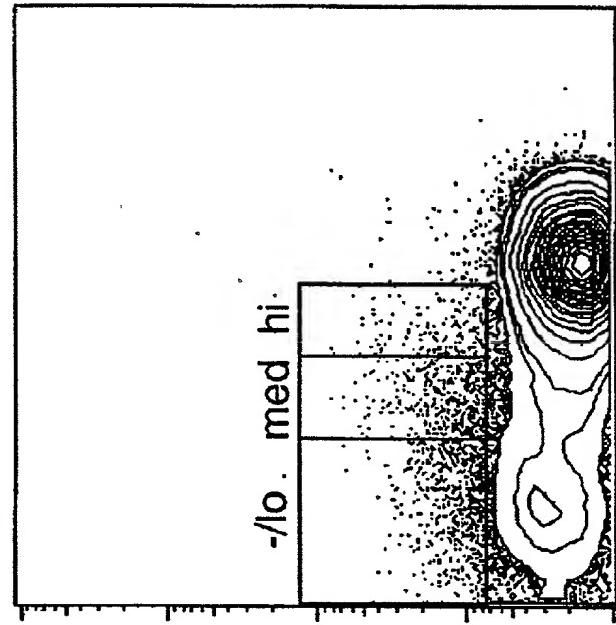
Isolation of Human Neural Stem Cells by Cell Surface Markers

Co-expressed on 5F3+ cells



PANEL A

Negative Marker for NSCS

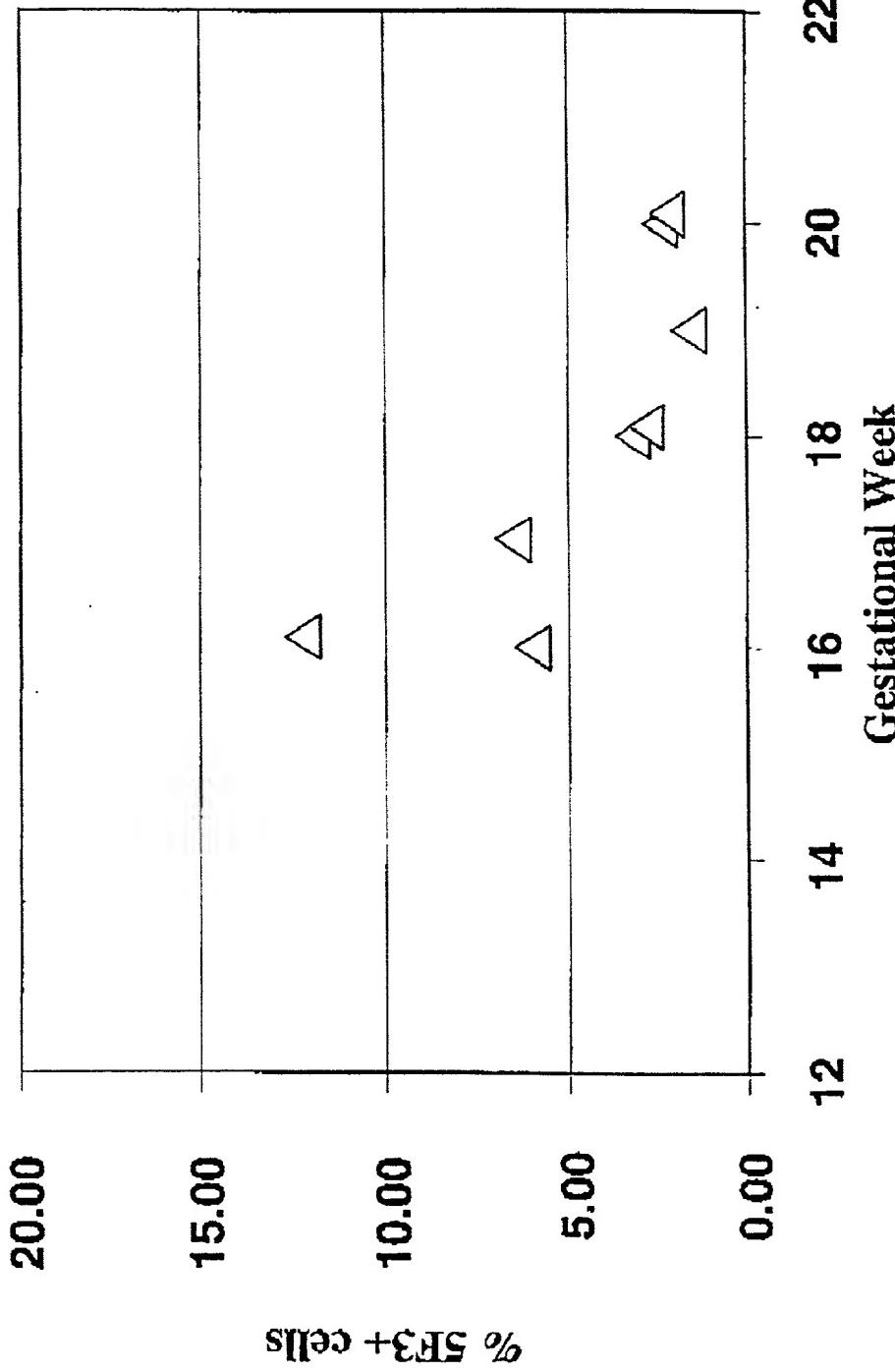


PANEL B

FIG. 4

Distribution of 5F3+ cells in fetal brain

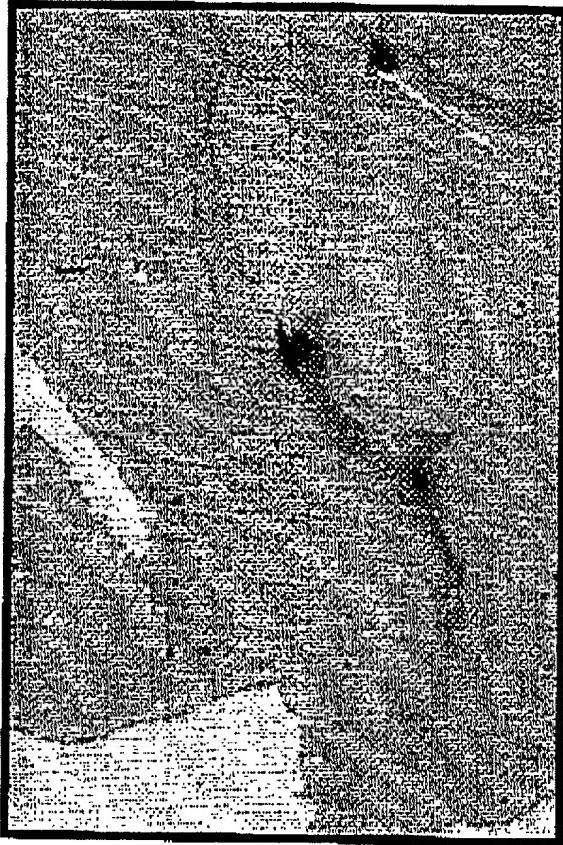
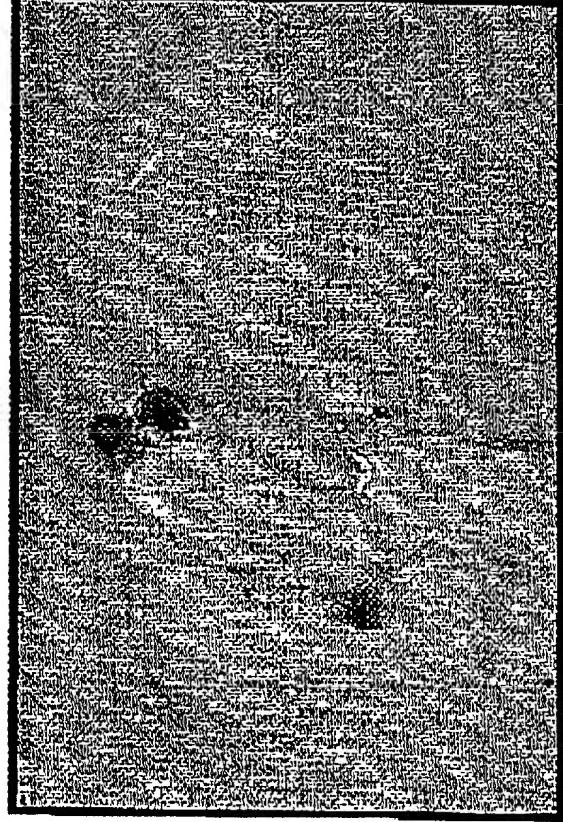
- ◆ The frequency of 5F3+ cells is lower at later gestational ages.
 - Extensive proliferation of non-stem cells compartment?
 - Need additional surface marker to subset 5F3+ cells?



F16.5

In vivo studies: Transplantation into NOD SCID mouse

- Human neural cells can be transplanted into the lateral ventricle of neonatal immunodeficient mice
- Engraftment and migration of human neurosphere cells were detected between 4-8 weeks after injection using a human specific Thy-1 antibody



PROPRIETARY & CONFIDENTIAL

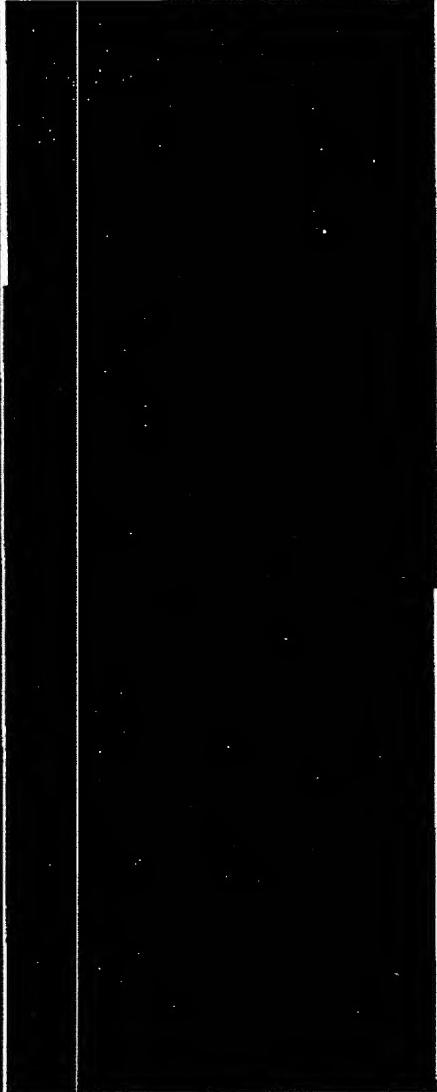
Fig. 6

Print
10/15/99

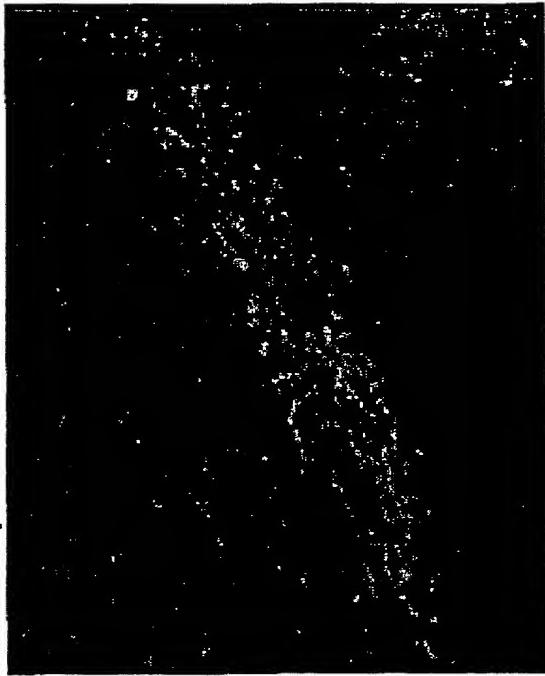
F06020 "21022660

Progeny of 5F3+ Sorted Neurosphere Cells Migrate through the RMS

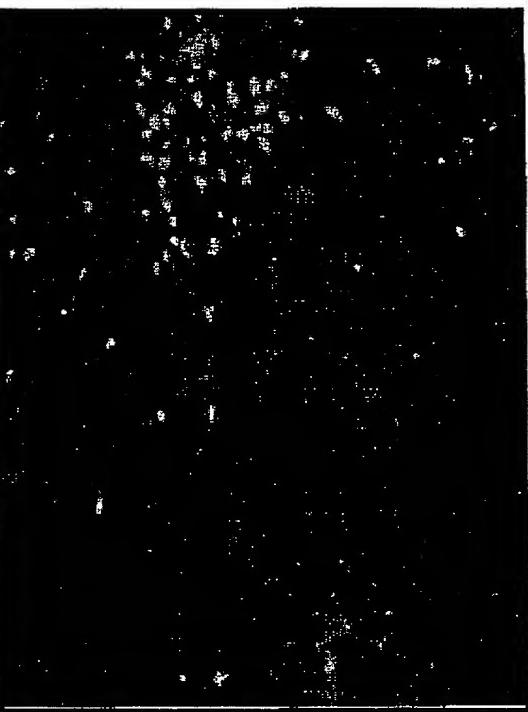
4x



Human β -tubulin in the RMS (20x)



Human nuclear antigen (20x)



5F3+ sorted neurosphere cells (p8) , 7 months post transplant

FIG. 7

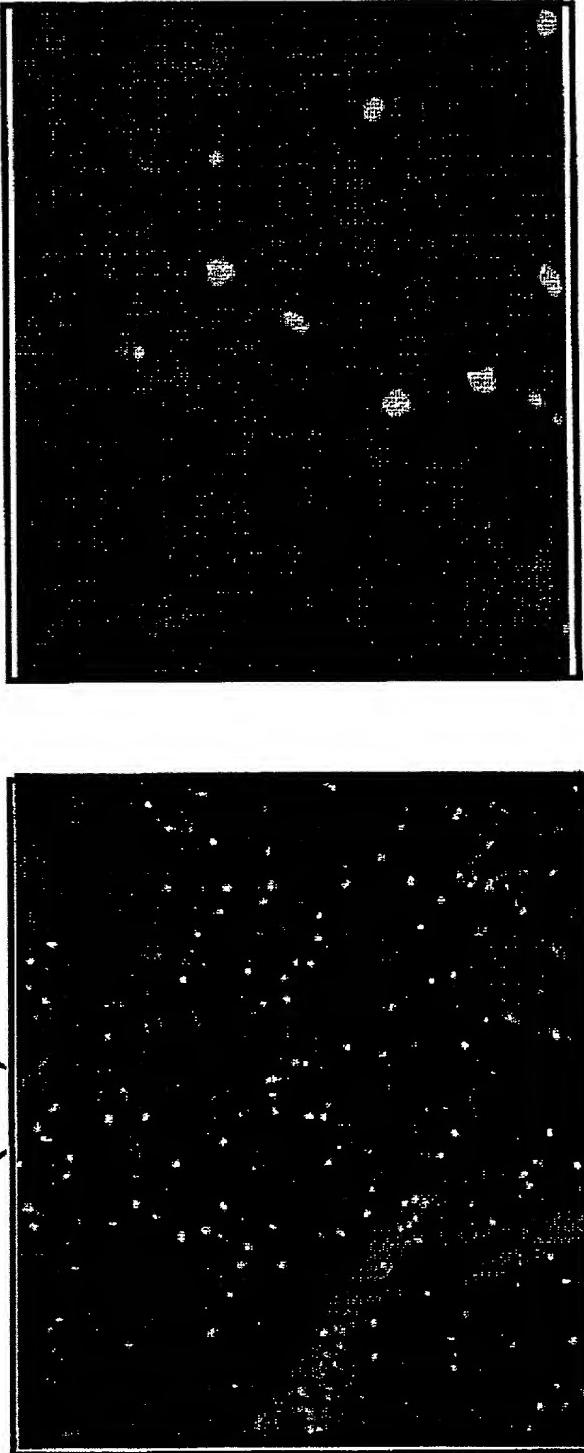
4007 10/20/99

Migration of Human Neural Cells into Olfactory Bulb

- Progeny of 5F3+ sorted neurosphere cells migrated through the RMS into Olfactory Bulb.

human nuclear antigen

(10x) (40x)



5F3+ sorted neurosphere cells (p8) , 7 months post transplant

File: 3